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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/051,450	04/06/98	MURAMATSU	E 93195-000059

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EXAMINER	
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ART UNIT	PAPER NUMBER

2871  
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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

**Office Action Summary**

Application No.

09/051,450

Applicant(s)

MURAMATSU, EIJI

Examiner

Julie-Huyen L. Ngo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,4,9,12 and 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,9,12 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION*****Priority***

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on August 6, 1996. It is noted, however, that applicant has not filed a certified copy of the JP 8-207402 application as required by 35 U.S.C. 119(b).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1, 3, 4, 9, 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation calling for "a portion other than a surface," in line 3 of claim 1, is inconsistent with the description in the specification and drawing (fig. 4). It appears that **a whole surface** that is opposite to the surface, which is joined to one of said substrates, is covered with a portion of the light-shielding member. It would be clear and consistent to recite the light-shielding member portion as ***a portion of a first light-shielding member.***

It is unclear which substrate Applicant intends to recite as "one of said substrates," in lines 9 and 10 of claim 1; also there is no antecedent for "the same surface of one of said substrates," in the first line of the fourth paragraph of claim 1. The recitation calling for "a portion of the polarizing plate located outside an effective display region of said polarizing plate," in the last paragraph of claim 1, is inconsistent

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with the description in the specification and drawing (figure 4). It appears that the light-shielding member (6a) further comprised a polarizing plate (6) located *inside* an effective display region of a display panel, and said polarizing plate is an *extension* of said light-shielding member. Examiner interprets the claim to read according to the specification and drawing for examination purposes.

Claim 4 is rejected for being indefinite as depending on a canceled claim 2. Also it is unclear which substrate Applicant intends to recite as "one of said substrates," in line 3. It appears to be the one of said substrates that mentioned earlier in claim 1.

It is unclear which substrate Applicant intends to recite as "one of said substrates," in the last line of claim 9. It appears to be the one of said substrates that mentioned earlier in claim 1.

The recitation in line 8 of claim 12 is inconsistent with the description in the specification and drawing (figure 4). It appears that the light-shielding member is secured to *the outer surface of the first substrate*.

Claims not specifically discussed above are rejected because of their dependence on the rejected claim(s).

Claims 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential element(s), such omission amounting to a gap between the elements. See MPEP § 2172.01.

Claim 12 does not include the light shielding member, which covers the semiconductor element's surface that is opposite to the first surface.

Claim 13 is rejected because of its dependence on claim 12.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 4, 9, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawaguchi et al. (EP 0402 106 A2, IDS Paper No. 7) in view of Hirai et al. (EP 0501 413 A2, IDS Paper No. 7)

Kawaguchi et al. disclose a liquid-crystal display device (figures 1-4) comprising all the limitations recited in claims 1, 3, 4, 9, 12 and 13 including:

(Claim 1) a pair of substrates (33, 32) which are opposite to each other through a liquid crystal (33), and a semiconductor element (36) which is joined to at least one (32) of said substrates

characterized in that a surface other than a surface, which is joined to said one of said substrates, of the surfaces of said semiconductor element is covered with a light-shielding member portion (38);

a second light-shielding member (39) for shielding light being toward said semiconductor element is arranged on a surface, opposite to the surface, to which said semiconductor element is joined, of the surfaces of said one of said substrates;

(claim 3) Kawaguchi et al. teach (col. 6, lines 33-40) that their invention can be applied to different display devices, beside TFT liquid crystal display device. Therefore, it would have been obvious for one of ordinary skill in the art to apply their teaching to a device which has a plurality of pixels having no active element arranged between a pair of substrates for shielding light incidents on the semiconductor element, as taught by Kawaguchi et al.

(claim 4) said semiconductor element is joined to one of said substrates such that an active surface of said semiconductor element faces said one of said substrates; and

(claim 9) said second light shielding member (39) comprises a planar sheet member having light-shielding properties (col. 4, lines 31-42) adhered to a surface of one of said substrates.

(claims 12 and 13) Although the Kawaguchi et al device does not disclose a polarizing plate formed on the outer surface of one of the substrates, it is well-known in the art for the liquid crystal panel to employ a polarizing plate for polarizing light passing through liquid crystal layer. Therefore, it would have been obvious for the Kawaguchi et al device to employ a polarizing plate on the outer surface of one of the substrates for polarizing light passing through the liquid crystal layer (33).

Hirai et al. teach (col. 3, line 15-col. 4, line 45 and figure 3) forming a liquid-crystal display device comprises a polarizing plate (37) having an extension portion (37a), which links the display panel (3) and the semiconductor (1). Doing so would prevent any disconnection between the semiconductor element (1) and the

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display panel (3) due to external forces such as shock and vibration applied to the semiconductor element (1).

Therefore, it would have been obvious for one of ordinary skill in the art to extend the light shielding member (39) for further comprising a polarizing plate having an extension portion, which at least shield a part of the semiconductor element (36) in the Kawaguchi et al device, as taught by Hirai et al. for the reasons set forth above, and for reducing manufacturing steps and cost since the light shielding member and the polarizing plate constitute the same material.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 3, 4, 9, 12 and 13 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie-Huyen L. Ngo whose telephone number is (703) 305-3508. The Examiner can normally be reached on T-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William L. Sikes can be reached on (703) 308-4842 from Monday - Thursday.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

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August 16, 2001



William L. Sikes  
Supervisory Patent Examiner  
Technology Center 2800